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(74) Agent: GUTERMAN, Sonia, K.; Lawson & Weitzman LLP, 88 Black Falcon Ave., Suite 345, Boston, MA 02111 (US).

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(71) Applicant (for all designated States except US): OMNIVIRAL THERAPEUTICS LLC [US/US]; 905 Centennial Road, c/o Heritage Homes, East Highway 35, Wayne, NE 68787 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): LEVINE, Howard, L. [US/US]; 24 Wright Farm Road, Concord, MA 01742 (US). KERNIS, William [US/US]; 112 Bolton Road, Harvard, MA 01451 (US).

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(54) Title: ANTIVIRAL PROTEINS WITH IMPROVED PROPERTIES AND METHODS THEREFOR

Gene and AA sequence

M L G K F S Q T C Y N S A I Q G S V L T S T C E R T N G G
1 AGGAGGACAG CTATGCTGGG CAAGTTCAAG CAGACCTGCT ACACAGCGC GATTCAGGGC AGCGTTCTGA CCAGCACCTG CGAACGTACCG AATGGTGGCT
TCCTCTGCT GATACGACCC GTTCAAGTCG GTCTGGACGA CTAAGTCCCG TCCGAAGACT GGTCTGGAC GCTTGCATGG TTACACCGA
Y N T S S I D L N S V I E N V D G S L K W Q P S N F I E T C R N T Q
101 AACAAACTCT TAGCAATTGAT CTGACACGGG TGATTTGAGAA TGTGGATGGC TCTCTGAAAT GGCAGCCGAG CAACTTCATT GAAACCTGTC GCAACACCCA
TGTTCTGAGG ATCGTAACTA GACTTGTGCG ACTAACTCTT ACACCTACCG AGAGACCTTA CGCTGGCTC GTGAAAGTAA CTTGGACAG CGTTGTGGGT
L A G S S E L A A E C K T R A Q Q F V S T K I N L D D H I A N I D
201 GCTGGCGGGCC AGCTCTGAAAC TGGCGGGCAGA ATGCAAGACT CGCGCGCAGC AGTTTGAGG CACCAAGATC AACCTGGACG ATCACATGGC GACATTTGAT
CGACCGCCCG TCGAGACTTG ACCGGCCGTG TACGTTCTGA CGCGGGCTCG TCAAAACACTC GTGGTTCTAG TTGGACCTGC TAGTGTAGCG CTTGTAACTA
G T L K Y E #
301 GGCACCCCTGA AGTATGAATA A
CGCTGGGACT TCACACTTAT T

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(57) Abstract: The invention provides novel recombinant proteins and compositions having non-naturally occurring N-terminal amino acids such as methionine, and methods of making and using the protein for greater anti-viral activity and less toxicity than naturally occurring proteins.